

ABSTRACT

The invention relates to devices for the treatment of heart disease and particularly to endo-arterial prostheses, which are commonly called stents. More particularly, the invention relates to methods of manufacturing and coating stents utilizing thermal spray processing (TSP). In one aspect the invention involves the use
5 of TSP for the manufacture of fine grained tubing for subsequent use as a stent or other tubular or ring-based implant, or the manufacture of intermediate sized tubing that may then be drawn to final size tubing and for the coating of a stent. An average grain size of less than 64 microns is achieved by the invention resulting in a stent having an annular wall average thickness of about eight or more grains.